

REMARKS

Applicants respectfully request further examination and reconsideration in view of the instant response. Claims 1, 5-11, 20 and 22-30 remain pending in the case. Claims 1, 3, 5-11 and 20-28 are rejected. Claims 3 and 21 are cancelled herein without prejudice. Claims 2, 4 and 12-19 have been previously cancelled. New Claims 29 and 30 have been added. Claims 1 and 20 are amended herein. No new matter has been added.

New Claims

New Claims 29 and 30 are added herein. Support for these claims is found in the current specification at least at page 9, line 29, through page 10, line 10, and anchoring recess 250 of Figures 2, 3 and 4. No new matter has been added.

35 U.S.C. §102(b)

Claims 1, 5-8, 10, 11, 20, 22-26 and 28 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent Application Publication 2002/0004251 by Roberts et al., hereinafter referred to as the "Roberts" reference. Applicants have reviewed the cited reference and respectfully submit that the embodiments of the present invention as recited in Claims 1, 5-8, 10, 11, 20, 22-26 and 28 are not anticipated by Roberts.

Applicants respectfully direct the Examiner to independent Claim 1 that recites that an embodiment of the present invention is directed to (emphasis added):

A light emission device comprising:

a lead frame comprising a first lead frame segment and a second lead frame segment, wherein said first lead frame segment comprises a first recess, wherein said first recess is a reflector cup, and wherein said first lead frame segment comprises a second recess;

a light source coupled to said first lead frame segment, wherein said light source resides at least partially within said first recess;

a wire bond coupled to said light source and coupled to said second lead frame segment; and

an epoxy cast encasing said light source, said wire bond, and a portion of said lead frame, such that said epoxy cast fills said second recess for anchoring said epoxy cast to said first lead frame segment.

Independent Claim 20 recites similar limitations. Claims 5-8, 10 and 11 that depend from independent Claim 1 and Claims 22-26 and 28 that depend from independent Claim 20 provide further recitations of the features of the present invention.

According to the Federal Circuit, “[a]nticipation requires the disclosure in a single prior art reference of each claim under consideration” (*W.L. Gore & Assocs. v. Garlock Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983); see also MPEP 2131). However, it is not sufficient that the reference recite all the claimed elements. As stated by the Federal Circuit, the prior art reference must disclose each element of the claimed invention “arranged as in the claim” (emphasis added; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984); see also *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990); see also MPEP 2131). In other words “[t]he identical invention must be shown in as complete detail as is contained in the ...claim” (emphasis added; *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); see also MPEP 2131).

Applicants respectfully submit that the claimed embodiments are not anticipated by Roberts because Roberts does not disclose each element of the claimed invention

“arranged as in the claim.” Applicants understand Roberts to teach a semiconductor radiation emitter package. In particular, Roberts does not teach, describe or suggest “an epoxy cast encasing said light source, said wire bond, and a portion of said lead frame, such that said epoxy cast fills said second recess for anchoring said epoxy cast to said first lead frame segment”, as claimed (emphasis added).

With reference to Figures 16a and 16b of Roberts, the Examiner recites cylindrical cutouts 1601 as disclosing “the first lead frame segment 204 comprising a second recess 1601 such that the epoxy cast 203 is anchored to the first lead frame segment 204” (see page 3, lines 3-6, of the Office Action mailed April 7, 2006). However, Applicants respectfully submit that epoxy cast 203 does not fill cylindrical cutouts. As shown in Figure 16b, encapsulant 203 does not fill the cylindrical cutouts 1601. In contrast, Applicants respectfully submit that the cylindrical cutouts 1601 do not include encapsulant 203, or at all come in contact with encapsulant 203.

Accordingly, Applicants respectfully assert that Roberts does not teach, describe or suggest “an epoxy cast encasing said light source, said wire bond, and a portion of said lead frame, such that said epoxy cast fills said second recess for anchoring said epoxy cast to said first lead frame segment”, as claimed (emphasis added).

Applicants respectfully assert that nowhere does Roberts teach, disclose or suggest the claimed embodiments of the present invention as recited in independent Claims 1 and 20, that these claims overcome the rejection under 35 U.S.C. § 102(b), and are in a condition for allowance. Therefore, Applicants respectfully submit that Roberts also does not teach, disclose or suggest the additional claimed features of the present invention as recited in Claims 5-8, 10 and 11 that depend from independent


Claim 1 and Claims 22-26 and 28 that depend from independent Claim 20. Applicants respectfully submit that Claims 5-8, 10, 11, 22-26 and 28 overcome the rejection under 35 U.S.C. § 102(b) as these claims are dependent on an allowable base claim.

35 U.S.C. §103(a)

Claims 9 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Roberts in view of United States Patent Application Publication 2004/0104391 by Maeda et al., hereinafter referred to as the "Maeda" reference. Claim 9 depends from independent Claim 1 and Claim 27 depends from independent Claim 20. Applicants have reviewed the cited references and respectfully submit that the embodiments of the present invention as recited in Claims 9 and 27 are patentable over Roberts in view of Maeda.

As described above in the remarks discussing the rejection of Claims 1, 5-8, 10, 11, 20, 22-26 and 28 under 35 U.S.C. §102(b), Applicants respectfully submit that the claimed embodiments are not anticipated by Roberts because Roberts does not disclose each element of the claimed invention "arranged as in the claim." In particular, Applicants respectfully submit that Roberts does not teach, describe or suggest "an epoxy cast encasing said light source, said wire bond, and a portion of said lead frame, such that said epoxy cast fills said second recess for anchoring said epoxy cast to said first lead frame segment", as claimed (emphasis added).

Moreover, the combination of Roberts and Maeda fails to teach or suggest this claim limitation because Maeda does not overcome the shortcomings of Roberts. Applicants understand Maeda to teach a semiconductor light emitting device. Applicants respectfully submit that Maeda does not teach, describe or suggest "said



first lead frame segment comprises a second recess", as claimed. Moreover, Applicants respectfully assert that Maeda does not teach, describe or suggest "an epoxy cast encasing said light source, said wire bond, and a portion of said lead frame, such that said epoxy cast fills said second recess for anchoring said epoxy cast to said first lead frame segment," as claimed (emphasis added).

Applicants respectfully assert that nowhere does Roberts in view of Maeda teach, disclose or suggest the claimed embodiments of the present invention as recited in independent Claims 1 and 20, that these claims overcome the rejection under 35 U.S.C. § 103(a), and are in a condition for allowance. Therefore, Applicants respectfully submit that Roberts in view of Maeda also does not teach, disclose or suggest the additional claimed features of the present invention as recited in Claim 9 that depends from independent Claim 1 and Claim 27 that depends from independent Claim 20. Applicants respectfully submit that Claims 9 and 27 overcome the rejection under 35 U.S.C. § 103(a) as these claims are dependent on an allowable base claim.

CONCLUSION

Based on the arguments presented above, Applicants respectfully assert that Claims 1, 5-11, 20 and 22-28 overcome the rejections of record and, therefore, Applicants respectfully solicit allowance of these Claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

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